

Silt fences are temporary measures for sediment control, usually consisting of posts with filter fabric stretched across them. Silt fences capture sediment laden water from small drainage areas, allowing water to slowly pass through the fabric while trapping sediment. Silt fences work best with other Best Management Practices (BMPs) such as sediment traps or basins.

#### **USAGE**

Install a silt fence prior to soil disturbance in the following construction areas:

- ♦ Along the perimeter of a project
- ♦ Where soil erosion occurs
- Below the toe of an exposed steep slope
- Along the streams and other waterways
- Around temporary soil stockpiles
- Below other small cleared areas
- Where effectiveness is required for one year or less

Use of a silt fence should be avoided in the following areas:

- Streams, channels, drain inlets or anywhere with a concentrated flow
- ♦ Where the maximum gradient upslope of the fence is greater than 50%
- Where the fence is at a higher elevation than the disturbed area

#### **BENEFITS**

- Removes sediment and prevents downstream damage from sediment deposits
- Reduces the speed of runoff flow
- Requires minimal clearing for installation
- Is relatively inexpensive as compared to other sediment controls

#### LIMITATIONS

- Is only appropriate in small drainage areas with overland flow
- Needs frequent inspection and maintenance to ensure effectiveness
- Avoid use in areas of constant or concentrated flow and areas where water is being pumped



## SILT FENCE

Estimated Cost \$1.00 - \$2.00 per linear foot installed

Price per foot decreases as quantity increases

Averages are based on costs for installation & maintenance, assuming 6 month lifespan

#### Alternatives

- ♦ Fiber roll
- ♦ Stone/sand bag berm
- ♦ Vegetative buffer

Notes:

INSERT LOCAL
MUNICIPALITY LOGO
AND NUMBER

### SILT FENCE

#### **MAINTENANCE**

- Silt fences need to be installed and maintained properly to be efficient
  - Follow DNR installation and performance tips and maintenance procedures carefully to avoid possible regulatory action
- Inspect the silt fence weekly, before anticipated rainfall events and after each rainfall event equal or greater than ½ inch in a 24 hour period
- Repair or replace cut, split, torn, slumping or weathered fabric
- Repair flow channels around fences
- ♦ Remove sediment from the fence if it reaches ½ the height of the fence
- Dispose of all excess sediment properly
- Leave silt fence in place until disturbed areas upland are stabilized
- ◆ Seed and mulch or discard accumulated sediment once silt fence is removed; backfill and repair all holes and depressions caused by removal
- ◆ If silt fence is temporarily removed or damaged, replace or repair fence according to DNR requirements



PROPERLY INSTALLED SILT FENCE



FABRIC JOINT WRAP

# CHARACTERISTICS OF A FAILING SILT FENCE

- Damaged or decomposed fabric
- Posts not standing vertical
- ♦ Fabric sags between posts
- ♦ Gap between fence and ground
- Flow channels allow sediment laden water to go around or under fence

# nt once silt fence is removed; backfill an val replace or repair fence according to DN CHARACTERISTICS OF

♦ Wood or steel supports

SILT FENCE

A PROPERLY INSTALLED

- Posts are placed on the downslope side of the fence
- ◆ Posts shall extend a minimum of 20" into the ground
- Posts spaced a maximum of 3 ft apart for non-woven fabric and 8 ft for woven fabric
- ◆ Ends of fence extend upslope to prevent water from flowing around fence
- Fabric is attached securely to the posts
- A support cord must be used along the top edge of fabric to ensure fabric remains tight between posts
- ◆ Height of fence shall be between 14 inches and 28 inches
- Fence follows contour, remaining perpendicular to the slope
- If more than one piece of fabric is used, each end of fabric is securely fastened to a post, posts are then wrapped around each other to produce a stable joint.



FAILING SILT FENCE



INSERT LOCAL
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Specific design,
installation and
Performance
Requirements must be
met for all BMPs.
These requirements can
be found in the DNR
Technical Standards

A link to the technical standards can be found at NEWWaterWisconsin.org

Notes: